

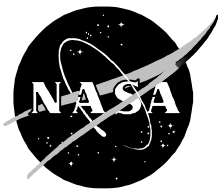
VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL

Release 5.0

NASA-NEMSCENT-VDD-13

PrISMS Contract

February 28, 2002



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

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RELEASE 5.0**

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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1. INTRODUCTION

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS) Central. This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1. IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS Central, Release 5.0 and has an effective release date of February 28, 2002.

1.2. PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
255	NEMS Screening
310	Add error check for duplicates on NEMS Central adds

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

<u>CCR</u>	<u>Title</u>
None	None

1.3. SCOPE

This VDD provides the functional and technical user of NEMS Central with information regarding the content, status, and structure of Release 5.0, including the following:

- Changes implemented since Release 4.9;
- Validation procedures to ensure the reliability of release changes;
- References to other documentation affected by this release;
- Detailed software installation instructions.

No waivers are associated with this release.

1.4. CONTACT POINTS

Sustaining Engineering for NEMS Central is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1. FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2. FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3. CRITICAL ISSUES

This section is not applicable for this release.

2.4. AFFECTED DOCUMENTS

No documents are affected by this release.

2.5. APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1. TECHNICAL SYSTEM INTERFACES

This section is not applicable for this release.

3.2. DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in this release.

3.3. SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4. DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1. Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2. Inventory of Objects

Refer to Appendix D, Section 2.1, for an inventory of Natural object types.

3.4.3. Storage Considerations

The changes represented by this release should not affect storage requirements.

3.4.4. Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Central Software Release 5.0 for detailed software installation procedures.

3.5. OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. KNOWN AND OPEN PROBLEMS

There are no known or open problems related to this release.

APPENDIX A - ABBREVIATIONS AND ACRONYMS

CC	Consolidation Center
CCR	Change Control Request
CSC	Computer Sciences Corporation
DBA	Database Administrator
DR	Discrepancy Report
FAX	Electronic Facsimile Transmission
IRM	Information Resources Management
JCL	Job Control Language
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPDMS	NASA Property Disposal Management System
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
VDD	Version Description Document

APPENDIX B - GLOSSARY

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES

Index of validation procedures for changes in this release:

Section	CCR	Title
----------------	------------	--------------

1.0	255	NEMS Screening
2.0	310	Add error check for duplicates on NEMS Central adds

Details for the validation procedures follow:

1.0 CCR 255 – NEMS Screening.

The NEMS Central screening website (<http://www.msfc.nasa.gov:80/sesaas/nems/central/idle.html>) is an accommodating but inefficient way to search for NEMS equipment. It is time consuming and seems easy to miss entries.

Description of Change

Code was changed to enhance the NEMS Central screening website to set it up as a database that could be search by inputting key words for specific fields (mfg code, model number, item name).

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

-

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
NCSCRNN1	Central Query Screening	Subpgm
NCSCRNN2	Central File Update Web Indicator	Subpgm
NCSCRNP1	Central File Update Web Indictor	Program
ETB100N1	Natural Buffer Pool Flusher	Subpgm
ETB100P1	EntireX Broker Application Server	Program
ETB100P2	Control Utility (EntireX Broker)	Program
TRN000P1	Central File Update Driver	Program

2.0 CCR 310 – Add error check for duplicates on NEMS Central adds.

Some of the add transactions do not check for duplicates before adding a record to the NEMS-CENT-EQUIP file. When NEMS Central is reloaded sometimes the timing can cause these transactions to add duplicate records.

Description of Change

Code was changed to check for duplicate records in an add.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- You must have a duplicate ECN for Trans 15 and a duplicate ECN for Trans 19 that are on the NEMS Central Equipment file.
- Execute JCL for NEMCENT2, NEMCENT3, and NEMCENT4.
Expected results: All jobs should execute correctly.
- Check all return codes for 00 and that each job ended successfully. Verify in NEMCENT4 that TRNERRP1 (Equipment file update Error report) was generated and the two duplicate ECNs are in there.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
TRN015P1	Add Trans 15 (Receipt from ROR from History)	Program
TRN019P1	Add Trans 19 (Reinstate items previously survey)	Program

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS CENTRAL SOFTWARE RELEASE 5.0

Introduction

Release information:

System Name: NEMS Central
Release Number: 5.0
Release Date: February 28, 2002
Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

The following datasets are located on the transient storage DASD volumes under the following data sets names:

- MSMOV.NEMC.PROD.R500.R0202.PRD
- MSMOV.NEMC.PROD.R500.R0202.SRC

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in Section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS CENTRAL files as a precautionary measure prior to installation.

2.0 Copy Source/Object Code

2.1 Copy Source Code

Load the NEMS Central source library from dataset:
MSMOV.NEMC.PROD.R500.R0202.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NEMSCENT, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by Type	
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	0
MAPS	0
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	3
PROGRAMS	7
COPYCODE	0
TEXT	0
PROCESS	0
MISCELLANEOUS OBJECTS	0
Total:	10

2.3 List of Source Code Modifications

The following are the modules added, modified and deleted.

Added Modules:

1. ETB100N1	Subprogram
2. ETB100P1	Program
3. ETB100P2	Program
4. NCSCRNN1	Subprogram
5. NCSCRNN2	Subprogram
6. NCSCRNP1	Program

Changed Modules:

1. NEMS	Program
2. TRN000P1	Program
3. TRN015P1	Program
4. TRN019P1	Program

Delete Modules:

Not applicable with this release.

2.3 Copy Object Modules

Not applicable with this release.

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

4.1 Data Dictionary Changes

This release will include the new enhancements for version 5.0.0. Details for changes in this release can be found under paragraph 4.1.3 Physical File Changes or by performing PREDICT reporting on the keyword NEMS-CENT-5.0.0.

Use SYSDICBE to load the PREDICT modifications from the dataset MSMOV.NEMC.PROD.R500.R0202.PRD.

The following NEMS Central DDMs should be generated after the PREDICT load is complete.

NEMS-CENT-EQUIP

4.1.1 Inventory of Objects

The object types and inventory listed below represent a comprehensive count of the PREDICT object modules for this release.

PREDICT Objects by Type:

Keyword	-	1
Standard Files	-	0
Conceptual Files	-	0
ADABAS Files and Views	-	3

4.1.2 Storage Considerations

The changes represented by this release should not have significant affect on storage requirements.

4.1.3 Physical File Changes

Use the ADABAS Utility commands listed below to build the JCL for file changes. The ADADBS control statements can be cut and pasted into the TSO ISPF editor. Call Rick Bishop (256)544-5352 with any questions or problems.

Release the following Superdescriptors:

NEMS-CENT-EQUIP		File # 040							
Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*	-----	-----	*	*	--	*
SP	1	WEB-FSC	A	5.0		D		SC	N
SP	1	WEB-ITEM-NAME	A	31.0		D		SD	N
SP	1	WEB-MFG-CODE	A	6.0		D		SE	N
SP	1	WEB-MFG-MODEL-NO	A	21.0		D		SF	N
SP	1	WEB-COST	A	12.0		D		SH	N

Using the following commands:

```
//DDKARTE DD *
ADADBS RELEASE FILE=040,DESCRIPTOR='SC'
ADADBS RELEASE FILE=040,DESCRIPTOR='SD'
ADADBS RELEASE FILE=040,DESCRIPTOR='SE'
ADADBS RELEASE FILE=040,DESCRIPTOR='SF'
ADADBS RELEASE FILE=040,DESCRIPTOR='SH'
/*
```

Invert the following Superdescriptors:

NEMS-CENT-EQUIP		File # 040							
Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*	-----	-----	*	*	--	*
SP	1	WEB-FSC-ECN	A	12.0		D		SC	N
SP	1	WEB-ITEM-NAME-ECN	A	38.0		D		SD	N
SP	1	WEB-MFG-CODE-ECN	A	13.0		D		SE	N
SP	1	WEB-MFG-MODEL-NO-ECN	A	28.0		D		SF	N
SP	1	WEB-COST-ECN	A	19.0		D		SH	N

Using the following commands:

```
//DDKARTE DD *
ADAINV INVERT FILE=040
ADAINV TEMPSIZE=???,SORTSIZE=???
ADAINV SUPDE='SC=AN(1,1),AH(1,4),AA(1,7) '
ADAINV SUPDE='SD=AN(1,1),AC(1,30),AA(1,7) '
ADAINV SUPDE='SE=AN(1,1),AD(1,5),AA(1,7) '
ADAINV SUPDE='SF=AN(1,1),AE(1,20),AA(1,7) '
ADAINV SUPDE='SH=AN(1,1),AI(1,11),AA(1,7) '
/*
```

5.0 Catalog Source Code

Run a batch job to catalog (CATALL) all modules in the NEMSCENT or other named library. It is not necessary to catalog the Global Data Area. You should receive 5 NATURAL 0002 errors for modules beginning with ADHOC21* that concern trying to stow a dynamic program. It is not necessary to attempt to resolve the 5 errors. The NASA Batch Standard Parameters should be used for the compile.

After all objects are compiled, the NEMS CENTRAL application will run under the NASA On-line Standard Parameter.

6.0 Post-Predict Data Conversion

There is no post-Predict data conversion required.

7.0 Perform Release-Specific Procedures

There are no release-specific procedures with this release.

8.0 Local JCL Mods

There are no Local JCL Mods with this release.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
 - 2.1 Copy Source Code
 - 2.2 List of Source Code Modifications
 - 2.3 Copy Object Modules
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
 - 4.1 Data Dictionary Changes
 - 4.1.1 Inventory of Objects
 - 4.1.2 Storage Considerations
 - 4.1.3 Physical File Changes
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods